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AUTHOR	Tracey, Richard
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ABSTRACT

Ways to interpret data from student ratings of teacher performance and approaches to maximize the use of student ratings are considered, based on the experiences of the Center for Instructional Development and Research (CIDR) at the University of Washington (UW). The use of student ratings at UW and other colleges is briefly considered, along with how student ratings can be part of a program of self-improvement of teaching effectiveness. Information on how to read UW's instructional assessment system (IAS) computer printout of standardized student ratings comments is provided, with attention to frequencies, mean rating, the percentage below good, and the relative rank. Reading students' demographic information to better able interpret student ratings is also covered. After considering data from the IAS printout, teachers can consult yellow sheets to find the students' specific comments. Sources of help to UW instructors who seek to use information provided in student ratings include the CIDR library, CIDR publications and productions, CIDR consultation services, and the Educational Assessment Center. An IAS questionnaire is included. (SW)

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NOW
MAKE THE MOST
OF
YOUR STUDENT RATINGS

Richard Tracey
Staff Associate

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Center for Instructional Development and Research
Jody Nyquist
Director for Instructional Development
Robert Abbott
Director for Program Research

and

Educational Assessment Center
Gerald Gillmore
Director

UNIVERSITY OF WASHINGTON

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I

HOW TO THINK ABOUT YOUR STUDENT RATINGS

Your student ratings are always wrong.

They are always wrong because students never perceive a class accurately enough, never experience it fully enough. They are wrong because any class is a social event too complex to analyze into a set of standard elements that are, by nature, simplifying abstractions. With each class involving its own set of participants whose activities mutually define each other, any evaluative information which excludes your own evaluation is wrong. And it is wrong to isolate one day's evaluation of the class from another.

But your student ratings are always right.

They are always right because they represent the collected perceptions of the other principal co-agents, besides you, in the class—its students. Every observer is likewise a participant, modern science teaches us, contributing to, if not constructing, what is observed: Your students are the other observer-participants in a class that, for 10 weeks, they co-create. This puts them in the unique position of evaluating your—*their* —class. Their ratings are always right because you cannot argue with their perceptions and experiences as your collaborators, knowing that you can never perceive the class through their senses or experience it through their minds.

"Although the evidence is fallible," wrote the UW's E. R. Guthrie in 1949, "it is far less fallible than self-judgment, which can allow men poorly qualified to misdirect their whole life-effort. There is no better criterion of teaching

aptitude than teaching performance, and there are no better judges of teaching performance than students and colleagues" (p. 115).

STUDENT RATINGS HERE AT THE U.W.

At the UW, students since 1924 have evaluated their classes, with Dean Guthrie guiding much of the student-ratings system from the mid-Twenties to the mid-Fifties. During this period the UW established itself as a leader in the systematic collection and evaluation of student ratings. In fact, ours is probably the country's longest continually running student-ratings program.

In 1974, Gerald Gillmore, Director of the Educational Assessment Center (EAC), introduced a major change to the student-ratings program—the Instructional Assessment System (IAS)—which, with some minor changes, you are using now. In the decade that the new system has been in place, more and more instructors have requested EAC to process their classes' ratings, even given the condition that in 1975, UW President John Hogness determined the data they collect are public information. In fact, the most recent usage shows a greater than 25-percent increase from Winter Quarter 1984 to Winter Quarter 1985 (from fewer than 1200 classes to more than 1500 classes). A full one-third of the 1985 figure is in excess of the University's per-quarter rationing of centrally funded ratings forms. In addition, IAS is now used by a dozen other colleges and universities from the Puget Sound Area to New York State.

STUDENT RATINGS HERE AND ELSEWHERE

From West Coast to East Coast, over half of all private and public colleges and universities in America use student ratings to collect evaluations of instruction (Braskamp, Brandenburg, & Ory, 1984). Indeed their consistent,

even increasing use by institutions and individuals alike belies the regularly voiced objections to student ratings as "just popularity contests." And the half-century of student ratings has been paralleled by a half-century of research into them, with the last decade seeing the area as among the most researched in the field (producing literally thousands of papers). The resulting literature points to the overall reliability and validity of student ratings: Students generally agree greatly in their ratings of a given class (Gillmore, 1983-84); and their ratings correlate with various other measures of teaching effectiveness—including alumni ratings (Braskamp et al., 1984; Burch, 1982) and measures of student learning (Cohen, 1981).

Just as faculty here and elsewhere may have perceived this overall degree of validity and reliability of student ratings, faculty may have perceived the inherent relativity of student ratings of their classes. And faculty may have perceived not only that student ratings may be affected by variables relative to individual classes but that any *class* is actually a complex blend, ever changing, of a course and an instructor interacting with a number of students and a number of teaching/learning environments. This dynamic, relativistic nature of a *class*, certainly beyond the control of the individual faculty member, may be broken down into certain variables of faculty, students, and course that some faculty have interpreted as biases to students' evaluations.

Thus, although it is well documented (Marsh, 1984) that **teaching quality is the single major factor in student ratings**, various sources (Braskamp et al., 1984; Burch, 1982; Marsh, 1984) have reported higher ratings for nontentured faculty, for fulltime faculty, for younger faculty, for more experienced faculty, and for more empathetic faculty. These sources

report higher ratings from students with a prior interest in the course, from students expecting higher grades in the course, and from students majoring in the department. And these sources report higher ratings in education and humanities courses, in upper-division courses, in elective courses, in discusssion courses, in more difficult courses, in courses with more than 150 students, and in courses with fewer than ten students.

But these relationships have been found only in studies of large numbers of classes. Also, according to Marsh (1984, p. 742), "For most of these characteristics, particularly the ones that have been more frequently studied, some studies have found results opposite to those reported here, whereas others have found no relation at all. . . . Few studies have found any of these characteristics to be correlated more than .30 with class-average ratings, and most reported relations are much smaller."

This often conflicting, usually overstated research is best summed up by Gillmore (1983-84, p. 575): "Factors outside of the teacher's control have little or no effect on ratings, on the average." And to Marsh (1984) and others, it seems more appropriate to interpret many of these factors as support for the validity of student ratings with respect to the various components of effective teaching/learning. If you would like further references to the substantial empirical literature on student ratings, contact the Educational Assessment Center or the Center for Instructional Development and Research.

STUDENT RATINGS IN A PROGRAM OF SELF-IMPROVEMENT OF TEACHING EFFECTIVENESS

Student ratings serve three different needs (Gillmore, 1980). Faculty need diagnostic information about their students' perceptions of teaching

effectiveness; administrators need comparative information used in personnel and curricular decisions; and students need "consumer" information used in their selection of courses and instructors. Though our Instructional Assessment System is used for each of these purposes, this publication focuses solely on the first purpose—diagnostic feedback to you about the effectiveness of your teaching. Accordingly, student ratings are best thought of as one assessment measure in your ongoing self-improvement of teaching effectiveness.

Teaching effectiveness, the current research confirms, cannot be equated with any method or style of instruction for every student in every discipline. So to meet your particular needs and concerns, a program of instructional development should not mandate specific teaching competencies. Rather, it should be individualized, which is the hallmark of the following program for self-improvement of teaching effectiveness, devised in 1978 in the UW Speech Communication Department (Staton-Spicer & Nyquist, 1979).

This self-improvement program has four stages. First, you assess your own teaching effectiveness, identifying your strengths and weaknesses in your teaching skills. Second, you set goals for improving your teaching effectiveness. Third, you adopt teaching strategies for achieving your self-improvement goals. Fourth, you reassess your teaching effectiveness, identifying improvements in your teaching. If your goals have been reached, you may select further areas to improve upon. If your goals have not been reached, you may adopt further strategies to achieve them.

It is possible for you to set up your own self-improvement program following the four stages outlined above. However, you should know that a fifth major component of this program is the service of an objective,

confidential teaching consultant, especially experienced with the various teaching strategies you would want to adopt in order to reach your goals.

Contact the Center for Instructional Development and Research for an appointment with such a consultant. He/She will use your prior ratings as one measure of the initial assessment of your teaching effectiveness; e.g., computing your "personal norms" from your printouts. Subsequently, your CIDR consultant will use your follow-up student ratings as one measure of your self-improvement, reassessing your teaching effectiveness after you have worked on strategies for achieving the goals suggested by the initial assessment.

This use of your student ratings in a program of self-improvement of teaching effectiveness is further explained in the CIDR/EAC pamphlet *Manage Your Student Ratings* (1985), available in a Faculty Edition from CIDR and in a TA Edition prepared by CIDR and available from TA supervisors. The use of your student ratings for the assessment of your teaching effectiveness is further explained in Parts II and III of this booklet.

NOW THINK ABOUT YOUR STUDENT RATINGS

Thinking about the Instructional Assessment System as *reassessment* agrees with Gerald Gillmore's original thoughts behind IAS, that student ratings should not be the sole measure of teaching effectiveness. More recently Gillmore (1983-84, pp. 575-76) put it this way:

> A properly constructed and administered student rating system appears to be a reasonably valid indicator of teaching competence, under normal circumstances. . . . [But] student ratings results should not be allowed to stand alone as the sole indicators of teaching quality. Other sources of

> information need to supplement that which is gained from students, and other avenues by which faculty can justify and otherwise support their ratings must be established. . . . In terms of evaluating teaching, student ratings deserve to play a major role, but they were never intended to, nor should they, shoulder the entire burden of the evaluation of faculty teaching.

Perhaps it is this thinking about student ratings as just a part of a much larger system that frees you from thinking only about their admitted relativity—a relativity that you may consider a bias if you think about student ratings as the consummate instructional evaluation. But when you think about student ratings as reassessment in an ongoing self-evaluation process, you quickly find that they become not as important to you. And ironically, when they become not as important, you have allowed them to become much *more* important to you, for you are able to think better about their inherent strengths. You understand that student ratings do not ask eternal, objective questions about the qualities of you or your course; rather, you understand that such ratings ask students an immediate, subjective question: "What did you perceive when you participated in our class?"

When you think about your student ratings as relativistic, subjective, and as one of multiple reassessments, you are freed to embrace those responses that support and/or are supported by the other measures of your teaching effectiveness.

II

HOW TO READ YOUR STUDENT RATINGS

The different forms and sections of the Instructional Assessment System were designed to collect different sorts of information. As discussed above, the IAS collects diagnostic information about the effectiveness of teaching; comparative information used in promotion, merit, and curricular decisions; and "consumer" information used in students' selections of courses and instructors. But of course you are not limited to using only one-third of the resulting information in your self-development as a more effective instructor.

Part II of this booklet first discusses how to read the IAS computer printout of your standardized student ratings and then how to read the student comments on your Yellow Sheets. Suggestions as to resources you may consult for specific instructional help follow in Part III.

HOW TO READ YOUR RATINGS PRINTOUT

Above all else, you should know that your IAS printout reports no current, official University-wide norms for the various items. So your printout does not report the relation of your ratings to those of any pre-existing group. However, department offices and the Educational Assessment Center do make available 1976-78 norm tables for Items 1-4 and their average, with breakdowns for most departments by instructor rank and course level. Your IAS printout reports each item's frequencies, mean rating, percent below good and relative rank.

FREQUENCIES are the numbers of ratings you received, for each item, in the six categories--Excellent, Very Good, Good, Fair, Poor, Very Poor. (Also

note the number of Omits in the righthand column: A large number of Omits on a given item may itself be a rating.) Comparing the frequencies for each item is an easy way to see whether students' perceptions of your class were widely held or were largely spread out among the raters, either due to the heterogeneity of your students or to your reaching just a fraction of them.

MEAN RATING is the arithmetic average of all students' responses on that item. (Omits are not computed into your mean ratings.) The mean is expressed numerically, computed from the numerical values (e.g., 4 for Very Good, 3 for Good, etc.) of the various ratings: **The UW campus-wide mean rating for each IAS item is about 3.50.**

The higher the mean, the more favorable is the rating, yet a mean rating can mask significant differences among the perceptions of your raters: If half your students rated the class Excellent and half rated it Very Poor, the mean rating of 2.5 would seem to indicate a class rating on that item of "Fair to Good," when in fact no student so perceived the class. **Scan your frequencies whenever you consider your mean ratings.**

% BELOW GOOD reveals the percentage of students who rated the class Fair, Poor, or Very Poor. As the campus-wide mean rating is about 3.50, any large percentage of below-Good ratings indicates instructional areas in which your students perceived problems. Any small percentage of below-Good ratings probably indicates areas in which students perceived effectiveness.

RELATIVE RANK orders each item in a section in terms of mean ratings. A ranking of "1" indicates the item with the highest mean and thus the most favorable rating within that section. Conversely, lower-ranked items indicate items with less favorable ratings, in turn revealing instructional areas in which your students perceived problems.

Check the Information About Yourself

Check that it is indeed *you* named as INSTRUCTOR in the top left corner of your printout. Then verify the rest of the information in that corner, including that in the COPIES REQUESTED FOR box. Read across the top of your printout, left to right, verifying which COURSE's ratings you are reading, for which quarter (DATE). Finally, verify that the printout is reporting ratings from the particular FORM you distributed to your students, A to G. If you find any serious errors call the Educational Assessment Center.

Before reading your ratings, review any earlier assessments you conducted for this particular course. As you are unlikely to feel all IAS items are of equal importance every quarter, remind yourself of the instructional areas which, last quarter, you felt to be more important. With the hindsight that comes of having that quarter behind you, confirm and/or alter now your earlier feelings.

This hindsighting should include a review of your "personal norms," as well as your determination of what for you is a "good" rating and a "bad" rating for each item. Of course, most people's first reaction is probably that a mean rating of 5.0, or Excellent, by 100% of the students who rate a given item, is ideally what every faculty member is shooting for. Yet it is not the faculty member alone which is being rated, but a class; and since every class--every faculty/students/course mix--is unique, it is less likely to receive ideal ratings than ratings which reflect the class's unique characterisitics.

Read Your Students' Demographic Information

You will be better able to interpret your students' ratings if you know some general information about the students who rated the class. The demographics also allow you to better compare ratings from one section or course to another.

First, read the number that completes the NUMBER OF STUDENTS RESPONDING WAS sentence, just above the four-cell box at the top right of your IAS printout. Is the number of students responding significantly less than your total enrollment at the time, less than would be accounted for by absences? The number may be more representative of the number of students who actually attended, thus co-created, the class; but if it is significantly lower than your enrollment, your printout may not reflect the ratings of your class as a whole. Does the number of raters compare with the tenth-day enrollment figure for the class? Does this tenth-day to last-day comparison recur in your ratings printouts?

In general, students in very small and very large classes (fewer than ten, more then 150) tend to give higher ratings (Braskamp, et al., 1984). Is this tendency repeated over a number of your classes? Whether it is or not, you may wish to consider this tendency as you interpret this printout. Finally, as long as your printout is based on the responses of at least 15 students, its ratings will be adequately reliable. But even ratings for very small classes do indicate the perceptions of students actually attending when you administered the IAS.

The rest of the demographic information about your students is presented within the four-cell box in the top right corner of your printout.

WANTED TO TAKE THE COURSE gives you some indication of your students' motives during registration. This may be significant to your printout, as prior student interest in a course is generally associated with higher ratings (Braskamp, et al., 1984). However, EAC information on this item suggests that at the UW, students by and large want to take the classes they enroll in, which would naturally enhance the educational environment of a class, and presumably its ratings. Does the prior-interest rating on your printout recur

over a number of your printouts? Does the indication that your students sign up to study under you, or to take certain courses that you teach, correlate with your student-ratings history?

COURSE WAS indicates how many of your students took this class within their major or minor, as an elective, etc. Were your raters mainly majors or were they taking the course as an elective? Research indicates that, over large numbers of classes studied, majors tend to give more positive ratings than non-majors, and that students in elective courses give higher ratings than those in required courses (Braskamp, et al., 1984). If you addressed this class as elective-takers, were they indeed all taking the class as an elective? Any mismatch between your perception of your students' roles and their perception of yours may have influenced the rest of the responses reported on your printout. But you should beware of overinterpreting this information: You may have addressed yourself solely to majors in your department because all except one student were so, yet that one non-major may have been the major determiner of the day-to-day personality of the class.

CLASS standing of your students may also influence their ratings. Since each rating item on the seven IAS forms implies a contrast between your class and all the others the student rater has taken, an entering freshman may not make as fine distinctions between classes as may a graduating senior.

Consider also the relationship between the class standings of your students and the course level. Students in higher-level courses tend to give higher ratings than in lower-level courses, perhaps due to the course's required/elective status (Braskamp, et al., 1984). But is yours a printout of a 400-level course with a class full of sophomores? Are you comparing this printout to previous ones representing classes full of seniors? And are those seniors majors or

minors, or distribution-seekers? Again, beware of overinterpreting the information: Although most courses are probably consistent in their attracting either a homogeneous group of the appropriate class standing or an absolutely heterogeneous group, no "anomolous" student's perceptions of your class should be dismissed.

GRADE EXPECTED often reveals interesting information. Of course, some faculty argue that promises of higher grades result in higher ratings. But others insist that students who give higher ratings must like the class, so they work harder and get higher grades; and still others maintain that well-taught classes result both in more learning, hence in higher grades, and in higher ratings. Whichever is closer to the truth for your class, you may be more interested in a simple comparison between your students' expectations about grades and the expections you believe you led them to have, via earlier grades and other messages, both verbal and nonverbal. Are there discrepancies or agreements between your expectations and your students'? Is there a history over a number of ratings printouts?

Now, before you read down to the rest of the ratings information on your printout, you should know that the items on Form C, for seminars, have tended to have somewhat higher reliabilities than those of the other six forms. Thus EAC analysis strongly suggests that students have been able to discriminate, from their point of view, better from poorer seminars, so the myth that seminars are always easier to teach and better liked by students may be dispelled. (In fact, students have seemed somewhat better able to make this discrimination than to discriminate the quality of any other types of classes.)

Also concerning particular ratings forms, you should know that classes rated on Form E, for skill-oriented courses, have tended to receive somewhat higher

ratings than classes rated on any of the other forms. Do students like hands-on courses better than all other types of courses? Or is it that faculty work harder on hands-on courses, or that they are more often taught by faculty with better "people skills"? Depending on your answers, you must also be willing to support the opposite answer concerning problem-solving courses, as classes rated on Form D have tended to receive somewhat lower ratings.

Still, avoiding Form D or, especially, choosing Form E will not "help" anyone's ratings—never mind that "helped" ratings would not help with anybody's self-development as an effective instructor. For it is not the form but the *class* that is important: It is on the general items in Section 1—consistent from Form A to Form F—that skill-oriented classes are rated higher, not on the diagnostic items in Section 2.

Read Your Students' General Evaluation

Although Section 1 of your student ratings is designed to provide administrators with an evaluation of the overall quality of your class, for comparison with other such evaluations of other classes, you can use the information for self-development purposes. (Form G is not identical to the other forms within Section 1. If your printout reports information from Form G, consult EAC or CIDR for more information on Items 1-4.)

Items 1-2 provide the general rating of the course and its content. This pair combines such elements as students' end-of-quarter interest in the material and their perceptions of its order and pacing, as well as that of textbooks, homework, and exams. Higher ratings on Item 1 should correlate with higher ratings on Item 2, with the pair correlating with your students' wanting to take the course at the time they registered. That is, the higher the number of YES

responses in the lefthand cell of the demographic-information box, the higher rated should be your course as a whole and the course content.

Items 3-4 provide the general rating of the instructor. This pair combines students' feelings about such things as your classroom and office-hour style(s) and the degree to which you met them at their level without condescending to them. Relatively equal ratings should occur for both items, although a 1976 EAC study (Gillmore) found that Item 3 received the highest average rating of any item on Forms A though E (the only forms constructed at that time).

Read Your Students' Diagnostic And "Consumer" Feedback

Section 2 was the only part of the IAS designed to provide diagnostic feedback about your course and your teaching. Yet Section 3—originally constructed to collect students' "consumer reports" for ASUW publication—now gathers information you may also use as diagnostic feedback.

Although Items 5-22 are similar on all forms, they are actually drawn from a 51-item pool. EAC reports fairly high inter-item correlations of these items with Section 1. One explanation is that students' ratings of some characteristics may have a "halo effect" on ratings of others. However, items in a similar category correlate more highly than items in a dissimilar category; that is, course-content items correlate more highly with one another than they do with what might be termed student-involvement items.

You should classify the items on the particular printout at hand into the following categories—or your own categories—then check for correlated ratings on the printout and across previous ones, as well as from your other measures of teaching effectiveness. The object is to look over them for groupings and

patterns that indicate instructional areas rated relatively high and areas in which the ratings indicate a relative need for improvement.

The 51 items are best considered according to the five dissimilar (but necessarily overlapping) categories found on each form:

Form	Course-Content Items
A	7, 8, 9, 10, 14, 18, 19
B	7, 8, 9, 18, 19
C	6, 10, 18, 19
D	7, 8, 9, 10, 11, 14, 18, 19
E	7, 14, 18, 19
F	5, 6, 7, 11, 18, 19, 20
G	7, 9, 11, 14, 15, 18, 19, 22

Course-Content items rate such features as students' confidence in your knowledge and their perception of the quality of your questions and problems, answers and explanations, examples and illustrations. Also included are students' reactions to texts, media, guests, and exams; and whether students felt class sessions were interesting. Higher ratings on Course-Content items should correlate with a higher rating for the general course items, Items 1-2.

Form	Instructional-Methods Items
A	5, 7, 8, 9, 13, 15, 16, 21 ,22
B	5, 6, 7, 8, 9, 13, 15, 16, 21, 22
C	5, 6, 7, 8, 13, 16, 21, 22
D	5, 6, 7, 8, 9, 13, 15, 16, 21, 22
E	5, 6, 7, 8, 12, 13, 14, 15, 16, 21, 22
F	5, 6, 10, 14, 15, 16, 20, 21, 22
G	5, 6, 7, 8, 9, 15, 16, 20, 21, 22

Instructional-Methods items reveal your students' feelings about your teaching techniques. These feelings begin with their perception of adequate

day-by-day preparation for class—your syllabi, handouts, pre-planned examples, turnaround time for corrected assignments, and familiarity with readings. They may include the order and emphasis of topics and of question opportunities, the proportion of hands-on time, the quality of intructional media, or the coordination between lectures and quiz sections. And they may also involve the arrangement of the class into small groups, as well as the apparent "fit" of this course with past or future courses and/or experiences. Here your students may also be evaluating your skill as a discussion leader or contributor, a problem-poser, a skill-demonstrator, a questioner, or an explainer. Students are sensitive enough to instructors' methods that higher ratings on these items can correlate with higher ratings in Section 1, especially Items 3-4, the general instructor items.

Form	Evaluation-Methods Items
A	20, 21, 22
B	20, 21, 22
C	20, 21, 22
D	11, 20, 21, 22
E	10, 20, 21, 22
F	20, 21, 22
G	10, 11, 20, 21, 22

Evaluation-Methods items indicate your students' attitudes about the projects, problems, papers, and exams by which you assessed their progress and/or graded them. Included here are opinions about your grading procedures, including perceived "fairness," as well as about your coordinating evaluation with instruction. Higher ratings on these items probably correlate with students' expecting higher grades—indicating the higher the grade expected, the better liked the evaluation methods.

Form	Instructor-Style Items
A	6, 8, 11, 12, 13, 15, 17
B	8, 10, 11, 12, 15, 17
C	6, 7, 8, 11, 12, 14, 17
D	8, 12, 13, 15, 17
E	8, 9, 10, 11, 12, 13, 15, 17
F	8, 9, 10, 13, 14, 15, 17
G	8, 12, 13, 14, 16, 17

Instructor-Style items rate your students' perceptions of your classroom personality and of your attitude toward them—similar to a physician's "bedside manner." This includes your showing enough confidence in your students to encourage their self-expression and to guarantee their artistic and intellectual freedom. It includes dealing with each student as an individual, recognizing his/her skill level and progress, and showing concern for his/her welfare. And it may include your skills as an orator, or even as an entertainer. Higher Instructor-Style ratings may correlate with higher ratings on the general instructor items, Items 3-4.

Form	Student-Involvement Items
A	12, 13
B	10, 12, 14
C	9, 12, 13, 14, 15
D	12
E	9, 10, 12
F	8, 10, 12, 13
G	6, 8, 12, 13

Student-Involvement items are Instructor-Style ratings from a different perspective. They suggest the degree to which your students felt interested in and engaged by the course content. They also suggest the degree to which they perceived you welcomed their direct participation as co-agents in their own

education, from permitting their questions to encouraging cross-teaching in small groups. Higher Student-Involvement ratings should correlate with higher ratings in Section 1.

Read Your Optional Items

It is difficult to provide each of four thousand faculty members with advice on reading his/her own individually customized optional items. (Information on designing your own optional items is available from EAC and CIDR, as well as in their *Manage Your Student Ratings* pamphlets [1985].)

Suffice it to say that you should read them as you have the other items on your printout: Look for groupings of those items that are similar both within Section 4 and over your complete printout. Then look for patterns in your other measures of teaching effectiveness. And watch for correlations between items and groupings of items. As relatively high or low ratings fall into patterns, within and/or between the categories outlined above, they may suggest to you some areas of instructional effectiveness and other areas perhaps in need of improvement.

But be aware that your Section 4 ratings may be lower than other ratings if you have constructed items regarding problem areas that you have tried to improve during the quarter.

HOW TO READ YOUR YELLOW SHEETS

After you have gleaned from your IAS printout the general areas rated as especially good and those perhaps requiring improvement, you can turn to your Yellow Sheets to find your students' specific comments on these areas. Yet because these open-ended comments may include much more than

that—anything, in fact—they hold some of the best diagnostic information provided by the Instructional Assessment System.

Of course, the information on the Yellow Sheets is subjective, in both its generation and your analysis of it. Students are free to comment on whatever they choose and to avoid whatever else. And at least some of the information is negative, as Yellow-Sheet Question II is the only item in all of the ratings that suggests changes*could* indeed be made to improve the teaching or the content of your course. (But then this invitation to negativism may balance the positivism of the 3.50-range mean ratings averaged by UW faculty.)

Read all responses to one question before any responses to the next question. But understand you may be lead to overinterpret as "snowballing criticism" the endorsements of Question I, the criticism of Question II, and what may be negative progress reports, for Question III, on your attempts to overcome instructional problems. So you may want to read the Question III responses, then II, then I. Read them as follows.

Read First for Clarifications

Read carefully the first couple of lines of each response (which of course may be the whole response). Here you are quite likely to find your students talking to you about your class in the assessment jargon of the mark-sense forms they had just completed. This means you may be able to find, in these opening answers, students' attempts to finish topics they only could broach on the ratings form—narrowing them down, adding analysis and/or illustration, rephrasing them "in their own words" and thus in their perceptions. So in at least the first sentence or two of each answer you are likely to find information more specific than the ratings on your printout. These you can categorize and

compare as you did the computerized items. Or, unlike other ratings measures, the responses on your Yellow Sheets can be read simply for aid in better understanding divergent ratings from your students.

Unfortunately, the first line or two of any response may restate the question or attempt to say what the writer thinks is "the right answer." Or the first couple of lines may unconsciously repeat the items on the IAS form. But when you acknowledge that the act of writing can itself generate the ideas being expressed (Elbow, 1973; Murray, 1982), you may consider that the best information on your Yellow Sheets, and perhaps in all of your ratings, results only when your students pass from "the topic" to The Topic. That is, when they get past whatever they perceive the ratings ask for and into what they themselves have wanted to tell you all quarter.

Read Next for Central Thoughts or Feelings

Now read the complete response for its central thoughts or feelings. If you can identify a central thought explicitly expressed by the writer, separate it from the surrounding writing by underlining it or drawing a box around it. But if a central statement is only implicit, then express it yourself right on the page, again separated by an underline or a box.

When you have found the central thoughts or feelings of all the responses to one question, reread just those central statements, sorting them into groups of similar statements. (You might need to copy some onto additional sheets of paper.) You may find that whatever your students have wanted to tell you all quarter does not jibe with standard categories like Evaluation Methods or Instructor Style. Either way, you will next find it helpful to write out the central thought or feeling for each group you have extracted from the complete

set of responses. When you do this, be sure to include in your sentence some indication of whatever divergence of opinion exists (akin to the frequencies of your IAS items). However, it is probably better not to write this sentence in the style of an IAS item; i.e., "Instructor's criticism of course textbook was Good to Very Good." Any benefits from translating your Yellow Sheets' feedback to conform to that of your IAS printout is probably outweighed by your substituting the patois of assessment for the vernacular of your students.

Just as you preselected which computerized items would be most pertinent to you this quarter, you should now select which of these central thoughts or feelings are most pertinent. Do not feel you must account for all of them; e.g., for any uncategorizable ones. But at the same time, again do not dismiss any one student's statements as anomolous. As with the other information from your student ratings, you should compare the pertinent thoughts or feelings here with your other measures of teaching effectiveness. You should identify for yourself groupings and patterns that indicate instructional areas rated relatively high and areas rated relatively low, suggesting some needed improvement.

SUMMARIZE YOUR STUDENT RATINGS

Summarize both sets of ratings information on a single sheet of paper. Narrate your quarter-long improvement program. Describe initial assessments and reassessments. Explain which ratings were higher, which lower, and which show a spread of perceptions. Analyze differences between your students' perceptions of the class and your own. If you so summarize, you will bring closure to your reading of your student ratings. You will find them much more helpful when you later compare them to subsequent ratings. And you will have in hand a key with which to open the consultations suggested in Part III.

III
HOW TO MAKE THE MOST OF YOUR STUDENT RATINGS

When student ratings of instruction end only with faculty pondering their ratings information, education at the UW is little affected. But when faculty use that information in the ongoing self-development of their teaching effectiveness, education can and does improve. And commonly, those faculty members who perceive problems in their teaching effectiveness, through student ratings or through other sources, do wish to improve their teaching.

Yet faculty members wishing to improve their teaching often do not know what they can do—or that it is even possible—to become more effective teachers. They can, of course, work independently to improve their teaching effectiveness, but that wheel has already been invented. It is almost always better if faculty go through a self-development program with the continuing advice of colleagues who are themselves experienced, successful college teachers. Thus your first resource would usually be someone in your own field whom you have come to know as a superior teacher.

Many times, however, there are reasons for obtaining assistance outside your department. Perhaps superior teachers in your discipline cannot clearly articulate how they have achieved this competence. After all, nothing in a faculty job description requires us to be able to analyze our teaching effectiveness or to instruct others about it. Or maybe you are uncomfortable discussing the issue with your colleagues.

In fact, most authorities say peer feedback is not effective if it leaves it to the instructor to seek out both the peers and the means with which they may

provide the feedback. To be effective, peer feedback should be sytematic, as suggested in *Evaluating Teaching* (1982), a collection of student-rating, peer-review, and self-evaluation research, forms, and policies useful for initial assessments and reassessments alike.

When seeking assistance outside their department, specific to effective teaching or student ratings, many instructors turn to the Center for Instructional Development and Research and the Educational Assessment Center.

THE CENTER FOR INSTRUCTIONAL DEVELOPMENT AND RESEARCH

A confidential, faculty-oriented service unit, CIDR provides, free of charge, a central campus facility to assist faculty of all ranks in their continued improvement of teaching. Since its restructuring in 1983, it has functioned as a resource clearinghouse for instructional problems, preparing original materials on instructional improvement and offering instructional consultation and access to educational materials, equipment, and services. CIDR also conducts research related to learning and teaching, and it designs research projects in response to instructors' requests for assistance. It is represented on University committees concerned with instructional development and is in regular contact with similar centers at colleges and universities across the nation.

The CIDR Library

The Center maintains an extensive library on all aspects of effective teaching and educational research. *Teaching Tips, Mastering the Techniques of Teaching*, and publications in the Michigan State University series of Guides for the Improvement of Instruction of Higher Education are indicative of the titles available from the bookshelves. And an extensive vertical file contains

hundreds of articles, conference papers, and technical reports ranging from such topics as learning theory, teaching theory, and student achievement, to those such as preparing syllabi, conducting workshops, role-playing, using student writing, and grading exams.

This library is open to all faculty and TAs. It is computer- cataloged in a relational data base, but since it is the working library of CIDR personnel, they can usually locate specific materials faster than inquiring faculty members, and are glad to so assist you. An annotated bibliography is also available, detailing the instructional resources available at the UW.

CIDR Publications and Productions

CIDR personnel have found that not all teaching resources that faculty request actually do exist. So the Center has embarked on a program of publishing and media production to prepare materials that our faculty have requested but that heretofore no one else has prepared.

This booklet is one recent example. Others are its companion pieces, the *Manage Your Student Ratings* pamphlets (1985). (These publications are co-sponsored by EAC.) Newer CIDR publications also include *Using Video to Enhance Instruction* (Quigley, 1985) and the revised edition of *Mentor: A Handbook for New Teaching Assistants* (Farris, 1985). The latter is an excellent primer on teaching at the UW, aimed of course at new TAs, but just as useful as a ready reference for faculty of all ranks. Also aimed at TAs but useful to others is the *Reference Manual for Teaching Assistants in Life Sciences Laboratories* (Trombulak, 1985).

Among recent CIDR videotapes are *Distinguished Teachers on Teaching* (Dunnington & Pease, 1984), featuring recipients of the Distinguished

Teaching Award seen teaching as well as reflecting upon their teaching, and including interviews with their students; and *The Role of the Graduate Teaching Assistant* (Quigley & Pease, 1985), showing TA lecturers, tutors, graders, lab teachers, and discussion leaders in action and reflection. This latter tape would be instructive to anyone newly assuming one of the teaching roles it explores.

CIDR Consultation Services

Much of what CIDR does cannot be videotaped, printed, or shelved in a library. The Center personnel spend a great deal of their time in one-to-one consultation with faculty members who seek out the services available, many of which have been developed in response to specific instructional needs.

Small Group Instructional Diagnosis (SGID) is one of CIDR's most popular services. It uses small-group discussion to elicit feedback, usually mid-quarter, to improve teaching, to provide ideas for strengthening a course, and to increase instructor-student communication. After an initial consultation with you, a CIDR consultant conducts an in-class evaluation with your students, then processes the information and shares it with you in a later consulting session. An SGID is one of the best measures available for making either an initial assessment of your teaching effectiveness or a reassessment after the adoption of alternate teaching techniques. And the SGID is enhanced by comparison with your student ratings.

Many of the alternate teaching techniques discussed in the SGID process can be practiced in a CIDR Microteaching session. Briefly, you teach other participants a short lesson while being videotaped. Afterwards you all review the videotape with a CIDR consultant, set a goal for improvement, then re-teach the lesson while being re-taped. The tape is then reassessed.

Center personnel also combine consultation with videotaping in classroom observation and critique. Following a discussion with a CIDR consultant, he/she observes one of your complete class sessions, which is also being videotaped. You meet later with the consultant for feedback on your teaching and perhaps meet a third time, after you have adopted alternate teaching techniques in response to the feedback.

Center personnel can assist you to develop or revise courses, syllabi, writing assignments, and exams. All consultations are integral to your CIDR consultant's customizing for you the program of self-improvement of teaching effectiveness outlined in Part I. It does require you to invest your time. But most faculty find the time well spent when they teach their subsequent courses.

And if the faculty have received CIDR assistance with managing their student ratings, they usually find their time even better spent. For Section V of the IAS forms and Question III of the Yellow Sheets, your CIDR consultant can help you design optional items focusing on the instructional goals you have worked out. Once you receive your ratings, your consultant can assist you in interpreting the numeric and qualitative information to compare it with your other assessment measures, then to determine if you have reached your teaching-effectiveness goals. Using your student ratings as the initial assessment in a new cycle of self-improvement, your consultant can suggest further changes in your teaching and point you to resources and resource persons with which you can follow up on your ratings.

THE EDUCATIONAL ASSESSMENT CENTER

In addition to its administrative functions, EAC provides instructional support to aid in the University's continuing effort to improve teaching across

disciplines. EAC regularly evaluates both teaching and learning in order to assess various educational programs and services. It also keeps an expansive library of the literature of assessment—student testing and grading, faculty assessment and review. The library includes the EAC Reports periodically published on the Center's continuing research.

Test Scoring

EAC's Test Scoring personnel can help you construct objective exams, score them, and help you with the weighting and summing of individual scores. They can return to you a full range of statistics on the test and its individual items and help you interpret the results. This way you may better understand the quality of the exam, as well as better understand exams in general.

The Instructional Assessment System

EAC also manages the Instructional Assessment System. IAS personnel can help you design the eight optional items for Section V of the ratings forms, as well as special questions for Question III of the Yellow Sheet. After your ratings have been processed, IAS personnel can help you interpret the results.

ADDITIONAL CAMPUS RESOURCES FOR EFFECTIVE TEACHING

Across the campus, additional resources offer services to all instructors concerned about teaching effectiveness. Keep abreast of the activities of the Faculty Senate Council for Instructional Quality. Formerly the Committee on the Evaluation and Improvement of Teaching, it completed several projects in recent years to help faculty assess and improve their teaching. For instance, CEIT funded *Evaluating Teaching* (1982). The members of the Council for

Instructional Quality welcome your comments and questions about student ratings, teaching effectiveness, or other concerns within their charge.

In addition to their access to the above, TAs also have available the Graduate and Professional Student Senate, which usually maintains a committee on TA/RA concerns and has funded certain teaching projects, too.

All faculty may go to resource centers offering consultations on effective teaching within a certain discipline or program. These include the Biology Learning Resource Center and the Health Sciences Center for Educational Resources, in both of which you will find colleagues and materials to help you prepare fifty-minute presentations or entire courses. The Division of Research in Medical Education may also be able to help you. And the Office of Minority Affairs Instructional Center can assist your effective teaching of students in the Equal Opportunity Program.

Another worthwhile resource is Instructional Media Services, offering slide, film, audio, video, and computer equipment to enhance your teaching. You may also request IMS to videotape a classroom session, for private playback in your office, where you can analyze this video record of your teaching as a part of your ongoing self-development.

In common with the campus resources outlined above, the Center for Instructional Development and Research and the Educational Assessment Center both recognize that teaching is a major responsibility of the University. CIDR and EAC jointly believe instructor-managed student ratings, interpreted correctly, with their implications considered and acted upon, can aid in the improvement of teaching effectiveness at the UW. With their assistance, you can now make the most of your student ratings.

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TELEPHONE NUMBERS

Center for Instructional Development and Research	**3-6588**
Educational Assessment Center	**3-1170**
Other Campus Resources (Alphabetically)	
Biology Learning Resource Center	3-8038
Division of Research in Medical Education	3-2259
Faculty Senate Council for Instructional Quality	3-5939
Graduate and Professional Student Senate	3-8576
Health Sciences Center for Educational Resources	5-1156
Instructional Media Services	3-9915
Office of Minority Affairs Instructional Center (EOP)	3-4240

INSTRUCTOR _____ COURSE _____ SECTION _____

INSTRUCTIONAL ASSESSMENT SYSTEM

DIRECTIONS: **COMPLETION OF THIS QUESTIONNAIRE IS VOLUNTARY. YOU ARE FREE TO LEAVE SOME OR ALL ITEMS UNANSWERED.**

USE A NO. 2 PENCIL
Fill the Bubble Darkly and Completely.
Do Not Make Stray Marks. Erase Completely.

START HERE

E - EXCELLENT
VG - VERY GOOD
G - GOOD
F - FAIR
P - POOR
VP - VERY POOR

FORM **A**

I. TO PROVIDE A GENERAL EVALUATION

1. THE COURSE AS A WHOLE WAS: E VG G F P VP
2. THE COURSE CONTENT WAS: E VG G F P VP
3. THE INSTRUCTOR'S CONTRIBUTION TO THE COURSE WAS: E VG G F P VP
4. THE INSTRUCTOR'S EFFECTIVENESS IN TEACHING THE SUBJECT MATTER WAS: E VG G F P VP

II. TO PROVIDE DIAGNOSTIC FEEDBACK TO THE INSTRUCTOR

1. COURSE ORGANIZATION WAS: E VG G F P VP
2. CLARITY OF INSTRUCTOR'S VOICE WAS: E VG G F P VP
3. EXPLANATIONS BY INSTRUCTOR WERE: E VG G F P VP
4. INSTRUCTOR'S ABILITY TO PRESENT ALTERNATIVE EXPLANATIONS WHEN NEEDED WAS: E VG G F P VP
5. INSTRUCTOR'S USE OF EXAMPLES AND ILLUSTRATIONS WAS: E VG G F P VP
6. QUALITY OF QUESTIONS OR PROBLEMS RAISED BY INSTRUCTOR WAS: E VG G F P VP
7. STUDENT CONFIDENCE IN INSTRUCTOR'S KNOWLEDGE WAS: E VG G F P VP
8. INSTRUCTOR'S ENTHUSIASM WAS: E VG G F P VP
9. ENCOURAGEMENT GIVEN STUDENTS TO EXPRESS THEMSELVES WAS: E VG G F P VP
10. ANSWERS TO STUDENT QUESTIONS WERE: E VG G F P VP
11. AVAILABILITY OF EXTRA HELP WHEN NEEDED WAS: E VG G F P VP

III. TO PROVIDE INFORMATION ABOUT THE COURSE TO OTHER STUDENTS

1. USE OF CLASS TIME WAS: E VG G F P VP
2. INSTRUCTOR'S INTEREST IN WHETHER STUDENTS LEARNED WAS: E VG G F P VP
3. AMOUNT YOU LEARNED IN THE COURSE WAS: E VG G F P VP
4. RELEVANCE AND USEFULNESS OF COURSE CONTENT IS: E VG G F P VP
5. EVALUATIVE AND GRADING TECHNIQUES (TESTS, PAPERS, PROJECTS, ETC.) WERE: E VG G F P VP
6. REASONABLENESS OF ASSIGNED WORK WAS: E VG G F P VP
7. CLARITY OF STUDENT RESPONSIBILITIES AND REQUIREMENTS WAS: E VG G F P VP

IV. TO PROVIDE GENERAL INFORMATION ABOUT YOURSELF

1. WHEN REGISTERING, WAS THIS A COURSE YOU WANTED TO TAKE?
   - Yes
   - No
   - Neutral
2. THIS COURSE IS:
   - in my MAJOR
   - in my MINOR or PROGRAM REQUIREMENT
   - a DISTRIBUTION REQUIREMENT
   - an ELECTIVE
   - OTHER
3. MY CLASS IS:
   - FRESHMAN
   - SOPHOMORE
   - JUNIOR
   - SENIOR
   - GRADUATE
   - OTHER
4. GRADE I EXPECT TO RECEIVE:
   - A (3.6 or above)
   - B (2.6 - 3.5)
   - C (1.6 - 2.5)
   - D (0.7 to 1.5)
   - E (0.0)
   - PASS

V. OPTIONAL ITEMS (USE ONLY AS DIRECTED)

1. E VG G F P VP
2. E VG G F P VP
3. E VG G F P VP
4. E VG G F P VP
5. 0 1 2 3 4 5 6 7 8 9
6. 0 1 2 3 4 5 6 7 8 9
7. 0 1 2 3 4 5 6 7 8 9
8. 0 1 2 3 4 5 6 7 8 9

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University of Washington
Seattle, WA 98105
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